

Our Community

Educational Opportunities

Overview

As one of the nation's premier national laboratories, Los Alamos National Laboratory feels a special obligation to provide enhanced educational opportunities for the students of northern New Mexico.

Math and Science Academy

Supported by the Laboratory, the Northern New Mexico Council for Excellence in Education developed the Math and Science Academy to significantly improve math and science education as part of larger systematic change in education for students in northern New Mexico. The project is designed to provide middle school teachers and students an opportunity to work with exemplary science and math mentors and gain content knowledge, experience and expertise by working in collaboration with a cadre of other committed schools and teachers.

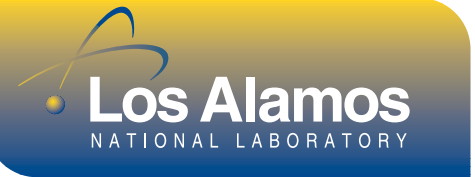
Three schools were selected: Chama Middle School, Mora Middle School, and Española Middle School East. In 2001-2002, the program expanded to

include all 7th grade teams at Española Middle School East, and one 8th grade team at Española Middle School West.

In school year 2001-2002, 22 teachers are participating in the program, including three student teachers, and more than 750 students.

Machinist Apprenticeships

The Laboratory reinstituted this program in partnership with Española-based, Northern New Mexico Community College. Apprentices who successfully complete the program, which provides four years of hands-on machining activities and academic courses, receive nationally recognized journeyman certification from the New Mexico State Apprenticeship Council.



Sharing resources and providing opportunities to achieve our mutual goals.

LANL Employee Scholarships

Over the last four years, Laboratory and contractor employees raised more than \$424,461 in pledges and contributions toward the Los Alamos Employees' Scholarship Fund. Those contributions have enabled:

- 3 Platinum scholarships of \$40,000 (\$10,000 for four years)
- 6 Gold scholarships of \$10,000 (\$2,500 for four years)
- 6 Compaq Silver one-year scholarships of \$2,000
- 2 Endowed Leadership one-year scholarships of \$1,000
- 99 Bronze one-year scholarships of \$1,000 for 116 northern New Mexico students

Tribal Educational Outreach

The Laboratory extended its Environmental Surveillance Program in July 2001. Visiting students also meet with Native American employees to learn about the employees' work and career experiences.

Elementary and middle school students were given a presentation about birds that included visits to local river banks to identify different species of birds. Plans are now underway to establish a unit lesson on birds for Santa Clara Day School 5th graders.

Science on Wheels staff visited San Ildefonso and San Juan Pueblos and gave presentations on cryogenics and static electricity. A group of San Ildefonso students also visited and toured the Bradbury Science Museum.

Fifteen elementary school students from Santa Clara Pueblo were given presentations on the moon and the planets by Native American Laboratory employees.



Laboratory staff interact with area students in a variety of forums to encourage their interest in math and science.

Laboratory Education Equipment Gift Program

The Laboratory donated more than \$2 million in equipment to schools and other organizations during 2001. The Laboratory Education Equipment Gift (LEEG) program, created in 2000, locates excess equipment for donation to colleges, universities, elementary and secondary schools and nonprofit organizations around the country. Recipients of excess equipment under the LEEG program must use it for technical and scientific education or research activities.

Donations included laser and lightning study equipment to The New Mexico Institute of Mining and Technology, a gas chromatograph to Northern New Mexico Community College, microscopes to the University of New Mexico, a computer and camera to the Santa Fe Farmers' Market, and camera equipment to Pojoaque School District.

Northern New Mexico Council for Excellence in Education

With strong Los Alamos National Laboratory participation, the Northern New Mexico Council for Excellence in Education (NNMCEE) is a community-based group that acts as a catalyst for school improvement and as an advocate for education and work force development in northern New Mexico.

Members include the State Department of Education, the University of New Mexico, New Mexico Highlands University, New Mexico Tech., the University of New Mexico Los Alamos branch, Northern New Mexico Community College, Santa Fe Community College, Los Alamos Schools, Espanola Schools, Pojoaque Schools, Santa Fe Schools, the University of California and Los Alamos National Laboratory.

Go Figure!

This program is a mathematics challenge cosponsored by Los Alamos and Sandia national laboratories, and is funded by the Department of Energy. The program is dedicated to strengthening the mathematical capabilities of the nation's youth by identifying, recognizing and rewarding those students who are talented in mathematical thinking.

Go Figure! targets students from grades 7-12 in northern New Mexico; it provides an opportunity to participate in problem solving and enriching mathematical experiences for the average student who enjoys math to the very best student who excels in math.

Participants are offered 13 problems and two-and-one-half hours of time in which to solve them. Problems selected require solutions with a minimal amount of knowledge and a great deal of creativity, originality and analytical thinking.

Robotics Competition

Cosponsored by Los Alamos National Laboratory and the Santa Fe Art Institute and funded by the Department of Energy, this program is aimed at recruiting future Lab employees. Its primary objective is to create excitement and interest in science by exposing students to the basics of robotic technology, with the ultimate goal to recruit students into scientific academic pursuits that will lead to future careers at LANL.

It is structured as a four-day graded-level series of workshops and competitions, with more advanced students (grades 6-12) attending for three days and beginning students (ages 6-12) attending a basic one-day workshop. The program is designed specifically to involve the youth of northern New Mexico and surrounding states in technology they can understand and that excites them.



*Los Alamos National Laboratory is operated by the University of California for the U.S.
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